

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 19, 22, 33, 37, 42, and 43 as set forth below. Claims 2-8, 12-14, 16-18, 20, 21, 23-25, 30, 34-36 were previously canceled.

The current listing of claims replaces all prior listings.

1. (Currently Amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, said peptide having a core of hydrophobic amino acids ~~signal-peptide activity~~ comprising a promyostatin signal peptide domain corresponding to amino acid residues from about 1 to 20 of full length promyostatin polypeptide and wherein the promyostatin polypeptide is selected from the group consisting of human (SEQ ID NO:2), murine (SEQ ID NO:4), rat (SEQ ID NO:6), chicken (SEQ ID NO:8), baboon (SEQ ID NO:10), bovine (SEQ ID NO:12), porcine (SEQ ID NO:14), ovine (SEQ ID NO:16), turkey (SEQ ID NO:18), and zebrafish (SEQ ID NO:20), or a polynucleotide complementary thereto.

2.-8. (Canceled).

9. (Original) A vector, comprising a polynucleotide of claim 1.

10. (Original) The vector of claim 9, wherein said vector is an expression vector.

11. (Previously Presented) An isolated host cell containing a polynucleotide of claim 1.

12.-14. (Canceled).

15. (Previously Presented) The polynucleotide of claim 1, wherein the promyostatin polypeptide is encoded by SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, or SEQ ID NO:19.

16.-18. (Canceled).

19. (Currently Amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, wherein said polypeptide having muscle growth inhibitory activity regulates muscle cell growth comprising a promyostatin myostatin domain corresponding to amino acid residues from about 267 or 268 to 374 or 375 of a full length promyostatin polypeptide, and wherein the promyostatin polypeptide is selected from the group consisting of human (SEQ ID NO:2), murine (SEQ ID NO:4), rat (SEQ ID NO:6), chicken (SEQ ID NO:8), baboon (SEQ ID NO:10), bovine (SEQ ID NO:12), porcine (SEQ ID NO:14), ovine (SEQ ID NO:16), turkey (SEQ ID NO:18), and zebrafish (SEQ ID NO:20), or a polynucleotide complementary thereto.

20.-21. (Canceled).

22. (Currently Amended) The polynucleotide of claim 19, wherein the encoded peptide ~~promyostatin-myostatin domain~~ corresponds [[ing]] to amino acid residues of about 267 to 374 of the promyostatin polypeptide selected from the group consisting of amino acid sequences as set forth in SEQ ID NO:2; SEQ ID NO:8; SEQ ID NO:10; SEQ ID NO:12; SEQ ID NO:14; SEQ ID NO:16; SEQ ID NO:18; and SEQ ID NO:20.

23.-25. (Canceled).

26. (Previously Presented) An isolated polynucleotide encoding a promyostatin myostatin domain, or a polynucleotide complementary to said polynucleotide, said myostatin domain having muscle growth inhibitory activity, and said myostatin domain comprising: amino acid residues from about 49 to 157 of SEQ ID NO:27; or amino acid residues from about 28 to 136 of SEQ ID NO:29.

27. (Original) A vector, comprising a polynucleotide of claim 19.
28. (Original) The vector of claim 27, wherein said vector is a viral vector.
29. (Previously Presented) An isolated host cell containing the vector of claim 27.
30. (Canceled).
31. (Previously Presented) The polynucleotide of claim 19, wherein the promyostatin polypeptide is encoded by SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, or SEQ ID NO:19.
32. (Previously Presented) An isolated host cell, which contains the polynucleotide of claim 19.
33. (Currently Amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, wherein said polypeptide regulates muscle cell growth ~~having myostatin binding activity~~, comprising a promyostatin prodomain corresponding to amino acid residues from about 20 to 262 or 263 of a full length promyostatin polypeptide, and wherein the promyostatin polypeptide is selected from the group consisting of human (SEQ ID NO:2), murine (SEQ ID NO:4), rat (SEQ ID NO:6), chicken (SEQ ID NO:8), baboon (SEQ ID NO:10), bovine (SEQ ID NO:12), porcine (SEQ ID NO:14), ovine (SEQ ID NO:16), turkey (SEQ ID NO:18), and zebrafish (SEQ ID NO:20), or a polynucleotide complementary thereto.
- 34.-36. (Canceled) .
37. (Currently Amended) The polynucleotide of claim 33, wherein the encoded peptide ~~promyostatin prodomain~~ corresponds ~~to~~ to amino acid residues from about 20 to 262 of the promyostatin polypeptide selected from the group consisting of amino acid sequences as set forth

in SEQ ID NO:2; SEQ ID NO:10; SEQ ID NO:12; SEQ ID NO:8; SEQ ID NO:18; SEQ ID NO:14; SEQ ID NO:16; and SEQ ID NO:20.

38. (Canceled).
39. (Previously Presented) A vector, comprising the polynucleotide of claim 33.
40. (Previously Presented) An isolated host cell, which contains the polynucleotide of claim 33.
41. (Previously Presented) An isolated polynucleotide, comprising SEQ ID NO:26 or SEQ ID NO:28.
42. (Currently Amended) The polynucleotide of claim 19, wherein the promyostatin myostatin domain corresponds to amino acid residues from about 268 to 375 as set forth in SEQ ID NO:4 or SEQ ID NO:6.
43. (Currently Amended) The polynucleotide of claim 19, wherein the promyostatin myostatin domain corresponds to amino acid residues from about 20 to 263 as set forth in SEQ ID NO:4 or SEQ ID NO:6.